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| 10/785,065 | 02/25/2004 | Nicholas J. Berg | 2241.0010000/TGD/JDS | 8925 |

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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

| EXAMINER | |
|---|---|
| MARCETICH, ADAM M | |

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| 3761 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/785,065 | BERG, NICHOLAS J. | |
| | Examiner | Art Unit | |
| | Adam Marcetich | 3761 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *11 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *15-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 February 2008 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilbur et al. (US Patent 6,180,000) in view of St. Clair (US Patent 4,549,329).

5. Regarding claim 1, Wilbur discloses a self-cleaning apparatus for transferring, collecting, and disposing of waste material from a patient (columns 1-2, lines 66-6), comprising:

a flexible waste material transfer hose having a length for transferring waste material from the patient to the apparatus, said waste material hose having an inlet at a first end of said hose and an outlet at a second end of said hose (columns 3-4, lines 66-3 and Fig. 2, tube 44 having an inlet and outlet);

a waste material collection chamber (column 2, lines 19-22 and Fig. 2, cylinder / tank / container 34. Examiner notes that element 34 is variously named as a cylinder, tank and container throughout the disclosure);

having a collection chamber inlet in communication with said outlet of said waste material transfer hose (column 2, lines 26-29 and Fig. 2, multi-port manifold 131 on cap 38 of chamber 39),

a collection chamber outlet (column 4, lines 21-25 and Fig. 2, outlet 54); and

a vacuum source opening (column 4, lines 4-10 and Fig. 2, opening of float valve 52); and

a vacuum source connected to said waste material collection chamber at said vacuum source opening by a vacuum line (column 3, lines 54-56 and Fig. 2, vacuum tube 42 connected to float valve 52).

Wilbur discloses the invention as substantially claimed, see above. However, Wilbur lacks a cleaning fluid chamber as claimed [claim 1]. St. Clair discloses a self-cleaning vacuum device comprising:

a cleaning fluid chamber positioned proximate to said waste material transfer hose and said waste material collection chamber for receiving a cleaning fluid (column 4, lines 33-40, toilet bowl. It is the Examiner's position that an alternative container can be provided in the form of a cup, beaker, bowl or similar open-mouthed receptacle to provide cleaning fluid.),

said cleaning fluid chamber having a cleaning fluid chamber inlet which receives said inlet of said waste material transfer hose by insertion of said waste material transfer hose inlet into said cleaning fluid chamber inlet, such that when said waste material transfer hose inlet is inserted into said cleaning fluid chamber inlet, the cleaning fluid is drawn into and through the length of said waste material transfer hose and said waste material collection chamber, by said vacuum source, to clean said waste material transfer hose and said waste material collection chamber (open-mouthed receptacle substantially capable of receiving an inlet of a waste material transfer hose and directing cleaning fluid through fluid pathway).

St. Clair provides the advantage of cleaning the complete fluid pathway of a suction device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilbur as discussed with the cleaning fluid chamber as taught by St. Clair in order to clean a complete fluid pathway.

6. Regarding claims 2 and 11, Wilbur discloses an apparatus comprising a float movably disposed within said vacuum line to close said vacuum line to prevent waste material within said waste material collection chamber from being drawn into said vacuum line by said vacuum source, when said waste material collection chamber is filled to capacity (column 4, lines 4-10 and Fig. 2, float valve 52 operating to prevent waste liquid from being drawn into vacuum system).

7. Regarding claim 3, Wilbur discloses an apparatus comprising a disposal pump in communication with said collection chamber outlet of said waste material collection chamber to pump waste material out of said waste material collection chamber through said collection chamber outlet (column 2, lines 15-17 and Fig. 2, pump 56).

8. Regarding claims 7 and 8, Wilbur discloses the invention as substantially claimed, see above. However, Wilbur lacks a cleaning fluid chamber as claimed [claims 7 and 8]. St. Clair discloses a cleaning fluid chamber as discussed for claim 1 above. The cleaning chamber of St. Clair is located at the beginning of a fluid pathway, and provides the advantage of cleaning a complete fluid pathway as discussed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilbur as discussed with the cleaning fluid chamber as taught by St. Clair in order to clean a complete fluid pathway.

9. Regarding claim 9, Wilbur discloses an apparatus wherein a waste material interface is connected to said inlet of said waste material hose, said waste material interface being a suction nozzle (columns 3-4, lines 66-6 and Fig. 2, nozzle 46).

10. Regarding claim 10, Wilbur discloses an apparatus for transferring, collecting and disposing of a material (columns 1-2, lines 66-6), comprising:

a flexible material transfer hose having a length for transferring material to the apparatus, said material transfer hose having an inlet at a first end of said hose and an outlet at a second end of said hose (columns 3-4, lines 66-3 and Fig. 2, tube 44 having an inlet and outlet);

a material collection chamber having a collection chamber inlet in communication with said outlet of said material transfer hose (column 2, lines 19-22, 26-29 and Fig. 2, cylinder / tank / container 34 having multi-port manifold 131. Examiner notes that element 34 is variously named as a cylinder, tank and container throughout the disclosure);

a collection chamber outlet (column 4, lines 21-25 and Fig. 2, outlet 54), and

a vacuum source opening (column 4, lines 4-10 and Fig. 2, opening of float valve 52);

a vacuum source connected to said material collection chamber at said vacuum source opening by a vacuum line to draw material into said material collection chamber through said inlet of said material transfer hose (column 3, lines 54-56 and Fig. 2, vacuum tube 42 connected to float valve 52); and

a disposal pump in communication with said collection chamber outlet to pump material out of said material collection chamber to dispose of material (column 2, lines 15-17 and Fig. 2, pump 56).

Wilbur discloses the invention as substantially claimed, see above. However, Wilbur lacks a cleaning fluid chamber as claimed [claim 10]. St. Clair discloses a self-cleaning vacuum device comprising:

a cleaning fluid chamber positioned proximate to said material transfer hose and said material collection chamber for receiving a cleaning fluid (column 4, lines 33-40, toilet bowl. It is the Examiner's position that an alternative container can be provided in the form of a cup, beaker, bowl or similar open-mouthed receptacle to provide cleaning fluid.),

said cleaning fluid chamber having a cleaning fluid chamber inlet which receives said inlet of said material transfer hose by insertion of said material transfer hose inlet into said cleaning fluid chamber inlet, such that when said material transfer hose inlet is inserted into said cleaning fluid chamber inlet, the cleaning fluid is drawn into and through the length of said inlet of said material transfer hose, by said vacuum source, to clean said material transfer hose, said material collection chamber and said disposal pump (open-mouthed receptacle substantially capable of receiving an inlet of a waste material transfer hose and directing cleaning fluid through fluid pathway).

St. Clair provides the advantage of cleaning a complete fluid pathway as discussed for claim 1 above. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilbur as discussed with the cleaning fluid chamber as taught by St. Clair in order to clean a complete fluid pathway.

11. Claims 4, 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilbur et al. (US Patent 6,180,000) in view of St. Clair (US Patent 4,549,329), further in view of Griffiths (US 5,914,047).

12. Regarding claim 4, Wilbur in view of St. Clair discloses the invention as substantially claimed, see above. However, Wilbur in view of St. Clair lacks a switch in electrical contact with a float and disposal pump as claimed [claim 4]. Griffiths discloses a liquid medical waste collection and treatment system comprising a switch in electrical contact with a disposal pump (column 9, lines 10-21 and Fig. 3, proximity sensors 90a and 90b sensing liquid waste in chambers 44a and 44b, then sending signal through electronic control unit/switch 88 to activate disposal pump drive 104).

Griffiths provides the advantage of saving energy and costs by limiting a sterilization system to periodic operation. It is the Examiner's position that continuous operation of a heated sterilization system as disclosed by Wilbur would use more energy than a periodically operated system. Therefore, the switch of Griffiths provides the advantage of energy and cost savings. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilbur in view of St. Clair as discussed with the switch as taught by Griffiths in order to reduce energy usage and costs.

Regarding the limitation of being in electrical contact with a float, proximity sensors 90a and 90b provides the same advantage of periodic operation and are capable of sensing a float position.

13. Regarding claims 5 and 14, Wilbur in view of St. Clair discloses the invention as substantially claimed, see above. However, Wilbur in view of St. Clair lacks a peristaltic pump as claimed [claims 5 and 14]. Griffiths discloses a disposal pump that is a peristaltic pump, connected to a drain to dispose of waste material (column 6, lines 59-63 and Fig. 3, peristaltic pump 34). Griffiths provides the advantage of avoiding clogging from larger particles that may enter the system. In other words, a peristaltic pump is capable of moving solid particles that may otherwise clog a turbine or rotor-operated pump. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilbur in view of St. Clair as discussed with the peristaltic pump as taught by Griffiths in order to avoiding clogging.

14. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilbur et al. (US Patent 6,180,000) in view of St. Clair (US Patent 4,549,329), further in view of Mescon (US Patent 5,788,852).

15. Regarding claims 6 and 12, Wilbur in view of St. Clair discloses the invention as substantially claimed, see above. However, Wilbur in view of St. Clair lacks a filter disposed within a vacuum line as claimed [claims 6 and 12]. Mescon discloses a dental waste suction system comprising a filter disposed within a vacuum line between a vacuum source and entrance to prevent waste from being drawn into said vacuum source (column 8, lines 55-64 and Fig. 4, filters 5 between vacuum trap 2 and vacuum pump 4). Mescon provides the advantage of preventing any particles from reaching a

vacuum pump, thereby reducing the possibility of malfunction and increasing operation efficiency (column 9, lines 4-14). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wilbur in view of St. Clair as discussed with the filter as taught by Mescon in order to reduce malfunctions and increase efficiency.

16. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilbur et al. (US Patent 6,180,000) in view of St. Clair (US Patent 4,549,329) in view of Mescon (US Patent 5,788,852), further in view of Griffiths (US 5,914,047).

17. Regarding claim 13, Wilbur in view of St. Clair in view of Mescon discloses the invention as substantially claimed, see above. However, Wilbur in view of St. Clair in view of Mescon lacks a switch in electrical contact with a float and disposal pump as claimed [claim 13]. Griffiths discloses a liquid medical waste collection and treatment system comprising a switch in electrical contact with a disposal pump (column 9, lines 10-21 and Fig. 3, proximity sensors 90a and 90b sensing liquid waste in chambers 44a and 44b, then sending signal through electronic control unit/switch 88 to activate disposal pump drive 104). Regarding rationale and motivation, see discussion of claim 4 above.

***Response to Arguments***

18. Applicant's arguments with respect to claims 1-14 as rejected by Walker and Walker in view of Griffiths have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- WALKER K G US 5741237
- Tenniswood; James R. US 6146136
- Michels; Ruth US 5357977
- Bradfield; Michael T. US 5879552
- Ohira; Junichi et al. US 5945004
- Hubner, Henry et al. US 20030129561
- Radford; Fred R. et al. US 6027490
- Beguiristain; Luis US 3612089

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Marcetich whose telephone number is 571-272-2590. The examiner can normally be reached on 8:00am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LoAn Thanh can be reached on 571-272-4966. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Adam Marcetich/
Examiner, Art Unit 3761

/LoAn H. Thanh/
Supervisory Patent Examiner, Art Unit 3764